

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-32 (Canceled).

Claim 33 (Currently Amended): A strip to be inserted between two substrates  
~~elements~~ to cause acoustic attenuation of noise propagating through at least one of the two  
~~elements~~ substrates,

wherein the strip is formed from at least one plastic-based damping material,

wherein the strip has an equivalent real stiffness per unit length  $K'_{eq}$  equal to at least  
25 MPa and an equivalent loss factor  $\tan\delta_{eq}$  equal to at least 0.25,

wherein at least one damping material is a one-component polyurethane that has an  
NCO percentage content of between 0.5 and 2% and comprises:

at least one polyesterpolyol with a functionality of two, an OH index iOH of between  
5 and 10, a glass transition temperature  $T_g$  of -50°C or below, and a softening point between  
50 and 80°C;

at least one polyesterpolyol with a functionality of two, having an index iOH between  
50 and 100 and a glass transition temperature  $T_g$  of -50°C or below;

at least one isocyanate with a functionality of between 2.1 and 2.7, and having an  
NCO percentage content of between 11 and 33%;

at least one catalyst; and

optionally, at least one filler.

Claim 34 (Canceled).

Claim 35 (Currently Amended): The strip as claimed in claim 33, wherein the strip is formed from ~~a single damping material~~ or from plural damping materials.

Claim 36 (Currently Amended): The strip as claimed in claim 35, wherein the damping ~~material~~ or materials exhibit adhesion properties with respect to the two substrates ~~elements~~.

Claim 37 (Currently Amended): The strip as claimed in claim 33, wherein the strip is formed from at least one damping material and from a nondamping adhesive material, the adhesive material configured to bond the two ~~elements~~ substrates together.

Claim 38 (Currently Amended): The strip as claimed in claim 37, wherein the adhesive material adheres by two opposed faces to the two substrates ~~elements~~ respectively, the damping material being bonded to at least one of the two substrates ~~elements~~.

Claim 39 (Currently Amended): The strip as claimed in claim 37, wherein the adhesive material adheres by one of its faces to the damping material that is bonded to one of the two substrates ~~elements~~ and adheres by its opposite face to the other of the two substrates ~~elements~~ to be joined together.

Claim 40 (Currently Amended): The strip as claimed in claim 35, wherein the strip comprises plural damping materials placed as a stack of layers one on top of another, each of the materials at ends of the stack being bonded to one of the two substrates ~~elements~~ to be joined together or to the adhesive material.

Claim 41 (Currently Amended): The strip as claimed in claim 35, wherein the strip comprises plural damping materials placed in juxtaposition one beside another, ~~butted together or otherwise~~, each of the materials having two opposed surfaces bonded to the two ~~elements~~ substrates to be joined together, respectively.

Claim 42 (Currently Amended): The strip as claimed in claim 40, wherein the strip comprises plural damping materials placed as a stack and in juxtaposition, at least one or two materials partly constituting the stack being bonded to the two ~~elements~~ substrates to be joined together.

Claim 43 (Currently Amended): The strip as claimed in claim 37, wherein the adhesive material is placed to be stacked with the at least one damping material, and/or is placed in juxtaposition with the at least one damping material, or is placed to be stacked with and in juxtaposition with the at least one damping material.

Claim 44 (Currently Amended): The strip as claimed in claim 37, wherein the at least one damping material comprises at least two damping materials, and wherein the at least two damping materials ~~together or with the adhesive material~~, are separated by an air space.

Claim 45 (Previously Presented): The strip as claimed in claim 37, wherein the nondamping adhesive material is a polyurethane mastic having a Young's modulus  $E'$  of 21 MPa and a loss factor  $\tan\delta$  of 0.2.

Claims 46-48 (Canceled).

Claim 49 (Currently Amended): The strip formed from the at least one single damping material as claimed in claim 33 ~~claim 48~~, wherein the strip has, at 20°C, with a reference cross section of 15 mm in width and 3 mm in thickness, an equivalent real stiffness per unit length of 400 MPa and an equivalent loss factor of 0.3.

Claim 50 (Canceled).

Claim 51 (Previously Presented): The strip formed as a stack of the damping material as claimed in claim 50 and of a nondamping adhesive material of the polyurethane mastic type, wherein the strip has, at 20°C, with a cross section of 15 mm in width and 3 mm in thickness for each of the two materials, an equivalent real stiffness per unit length of 70 MPa and an equivalent loss factor of 0.95.

Claims 52-54 (Canceled).

Claim 55 (Currently Amended): The strip as claimed in claim 33, wherein the strip is applied to at least one of the ~~elements~~ substrates by a process selected from the group consisting of extrusion, and/or of encapsulation, and/or of transfer from a molding, and/or of injection molding, and combinations thereof.

Claim 56 (Previously Presented): The strip as claimed in claim 33, wherein the strip has a uniform or nonuniform cross section over all or part of its length.

Claim 57 (Currently Amended): The strip as claimed in claim 33, wherein the strip is joined to two ~~elements~~ substrates comprising materials selected from the group consisting of ~~of the~~ metal-metal, glass-glass, metal-plastic, plastic-glass, and ~~and~~ [[or]] plastic-plastic ~~[[type]]~~.

Claim 58 (Canceled).

Claim 59 (Previously Presented): The strip as claimed in claim 55, wherein the strip is used for attachment of a glazing to the body of a motor vehicle.

Claim 60 (Previously Presented): The strip as claimed in claim 59, wherein the glazing includes a laminated glazing assembly comprising at least two glass sheets and a film with acoustic properties.

Claim 61 (Currently Amended): A method of evaluating acoustic damping properties of a strip configured to be inserted between two ~~elements~~ substrates, the strip being formed from at least one damping material, comprising:

evaluating equivalent real stiffness per unit length  $K'_{eq}$  of the strip and equivalent loss factor  $\tan\delta_{eq}$ , the strip having acoustic damping properties when the equivalent real stiffness per unit length is at least equal to 25 MPa and the equivalent loss factor is at least 0.25.

Claim 62 (Previously Presented): The method as claimed in claim 61, wherein the evaluating the equivalent real stiffness per unit length  $K'_{eq}$  of the strip and of the equivalent loss factor  $\tan\delta_{eq}$  comprises measuring Young's modulus  $E_i'$  and loss modulus  $E_i''$  of each constituent material of the strip and calculating using the formulae:

$$[K'_{eq}]^n = \sum [K_i']^n \quad (1)$$

$$K_i' = E_i' \times \frac{L_i}{e_i} \quad (2)$$

$$\tan\delta_{eq} = \frac{K_{eq}''}{K_{eq}'} \quad (3)$$

where  $L_i$  and  $e_i$  are the width and the thickness of the material, respectively.

Claim 63 (Previously Presented): The method as claimed in claim 62, wherein the Young's modulus  $E_i'$  and the loss modulus  $E_i''$  of each constituent material of the strip are measured by a viscoanalyzer.

Claim 64 (Previously Presented): The method as claimed in claim 63, wherein the viscoanalyzer is used to make direct measurements of the equivalent real stiffness  $k'_{eq}$  and the equivalent loss modulus  $k''_{eq}$  of a strip specimen with a cross section identical to that of the strip and with a length  $L$  and then the following are calculated:

ratio of the measured equivalent real stiffness to the length  $L$  to obtain the equivalent real stiffness per unit length  $K'_{eq}$  of the strip:  $K'_{eq} = k'_{eq}/L$ ; and

ratio of the measured equivalent loss factor to the measured equivalent real stiffness  
to obtain the equivalent loss factor  $\tan\delta_{eq}$  of the strip:  $\frac{k_{eq}''}{k_{eq}'}$ .

Claim 65 (New): A strip to be inserted between two substrates to cause acoustic attenuation of noise propagating through at least one of the two substrates,  
wherein the strip is formed from at least one plastic-based damping material,  
wherein the strip has an equivalent real stiffness per unit length  $K'_{eq}$  equal to at least 25 MPa and an equivalent loss factor  $\tan\delta_{eq}$  equal to at least 0.25,  
wherein at least one damping material is a one-component polyurethane that has an NCO percentage content of between 0.5 and 2% and comprises:  
at least one polyesterpolyol with a functionality of two, having an OH number between 20 and 40, and a glass transition temperature  $T_g$  of between -40 and -20°C;  
at least one polyesterpolyol with a functionality of two, having an OH number between 30 and 90, a glass transition temperature  $T_g$  between 0 and 30°C, and a softening point between 50 and 70°C;  
at least one isocyanate having a functionality between 2.1 and 2.7 and an NCO percentage content of between 11 and 33%;  
at least one catalyst; and  
optionally, at least one filler.

Claim 66 (New): The strip as claimed in claim 65, wherein the strip is formed from plural damping materials.

Claim 67 (New): The strip as claimed in claim 66, wherein the damping materials exhibit adhesion properties with respect to the two substrates.

Claim 68 (New): The strip as claimed in claim 65, wherein the strip is formed from at least one damping material and from a nondamping adhesive material, the adhesive material configured to bond the two substrates together.

Claim 69 (New): The strip as claimed in claim 68, wherein the adhesive material adheres by two opposed faces to the two substrates respectively, the damping material being bonded to at least one of the two substrates.

Claim 70 (New): The strip as claimed in claim 68, wherein the adhesive material adheres by one of its faces to the damping material that is bonded to one of the two substrates and adheres by its opposite face to the other of the two substrates to be joined together.

Claim 71 (New): The strip as claimed in claim 66, wherein the strip comprises plural damping materials placed as a stack of layers one on top of another, each of the materials at ends of the stack being bonded to one of the two substrates to be joined together or to the adhesive material.

Claim 72 (New): The strip as claimed in claim 66, wherein the strip comprises plural damping materials placed in juxtaposition one beside another, each of the materials having two opposed surfaces bonded to the two substrates to be joined together, respectively.



Claim 73 (New): The strip as claimed in claim 71, wherein the strip comprises plural damping materials placed as a stack and in juxtaposition, at least one or two materials partly constituting the stack being bonded to the two substrates to be joined together.

Claim 74 (New): The strip as claimed in claim 68, wherein the adhesive material is placed to be stacked with the at least one damping material, is placed in juxtaposition with the at least one damping material, or is placed to be stacked with and in juxtaposition with the at least one damping material.

Claim 75 (New): The strip as claimed in claim 68, wherein the at least one damping material comprises at least two damping materials, and wherein the at least two damping materials are separated by an air space.

Claim 76 (Previously Presented): The strip as claimed in claim 68, wherein the nondamping adhesive material is a polyurethane mastic having a Young's modulus  $E'$  of 21 MPa and a loss factor  $\tan\delta$  of 0.2.

Claim 77 (New): A strip to be inserted between two substrates to cause acoustic attenuation of noise propagating through at least one of the two substrates,  
wherein the strip is formed from at least one plastic-based damping material,  
wherein the strip has an equivalent real stiffness per unit length  $K'_{eq}$  equal to at least 25 MPa and an equivalent loss factor  $\tan\delta_{eq}$  equal to at least 0.25,  
wherein the at least one damping material is a polyurethane prepolymer that has an NCO percentage content of between 0.5 and 2%, the material comprising:

at least one polyetherpolyol with a functionality of two, having an index iOH of between 25 and 35, a glass transition temperature  $T_g$  below  $-50^{\circ}\text{C}$ , and a molecular mass between 3500 and 4500;

at least one polyetherpolyol with a functionality of between 2.3 and 4, having an index iOH between 25 and 800, and a glass transition temperature  $T_g$  below  $-50^{\circ}\text{C}$ ;

at least one polyesterpolyol with a functionality of two, having an index iOH between 20 and 40 and a glass transition temperature  $T_g$  between  $-40$  and  $-20^{\circ}\text{C}$ ;

at least one polyesterpolyol with a functionality of two, having an index iOH between 30 and 90, a glass transition temperature  $T_g$  between  $0$  and  $30^{\circ}\text{C}$ , and a softening point between  $50$  and  $70^{\circ}\text{C}$ ;

at least one isocyanate with a functionality of between 2.1 and 2.7 and an NCO percentage content between 11 and 33%;

at least one catalyst; and

optionally, at least one filler.

Claim 78 (New): The strip as claimed in claim 77, wherein the strip is formed from plural damping materials.

Claim 79 (New): The strip as claimed in claim 78, wherein the damping materials exhibit adhesion properties with respect to the two substrates.

Claim 80 (New): The strip as claimed in claim 77, wherein the strip is formed from at least one damping material and from a nondamping adhesive material, the adhesive material configured to bond the two substrates together.

Claim 81 (New): The strip as claimed in claim 80, wherein the adhesive material adheres by two opposed faces to the two substrates respectively, the damping material being bonded to at least one of the two substrates.

Claim 82 (New): The strip as claimed in claim 80, wherein the adhesive material adheres by one of its faces to the damping material that is bonded to one of the two substrates and adheres by its opposite face to the other of the two substrates to be joined together.

Claim 83 (New): The strip as claimed in claim 77, wherein the strip comprises plural damping materials placed as a stack of layers one on top of another, each of the materials at ends of the stack being bonded to one of the two substrates to be joined together or to the adhesive material.

Claim 84 (New): The strip as claimed in claim 77, wherein the strip comprises plural damping materials placed in juxtaposition one beside another, each of the materials having two opposed surfaces bonded to the two substrates to be joined together, respectively.

Claim 85 (New): The strip as claimed in claim 83, wherein the strip comprises plural damping materials placed as a stack and in juxtaposition, at least one or two materials partly constituting the stack being bonded to the two substrates to be joined together.

Claim 86 (New): The strip as claimed in claim 80, wherein the adhesive material is placed to be stacked with the at least one damping material, is placed in juxtaposition with

the at least one damping material, or is placed to be stacked with and in juxtaposition with the at least one damping material.

Claim 87 (New): The strip as claimed in claim 80, wherein the at least one damping material comprises at least two damping materials, and wherein the at least two damping materials are separated by an air space.

Claim 88 (Previously Presented): The strip as claimed in claim 80, wherein the nondamping adhesive material is a polyurethane mastic having a Young's modulus  $E'$  of 21 MPa and a loss factor  $\tan\delta$  of 0.2.

Claim 89 (New): The strip formed as a stack of the at least one damping material as claimed in claim 65 and of a nondamping adhesive polyurethane mastic material, wherein the strip has, at 20°C, with a cross section of 15 mm in width and 3 mm in thickness for each of the two materials, an equivalent real stiffness per unit length of 70 MPa and an equivalent loss factor of 0.95.

Claim 90 (New): The strip as claimed in claim 77, wherein the strip comprises, the NCO % content being between 1.8 and 2.2%:

between 180 and 220 g of a polyetherpolyol with a functionality of two, having an index iOH between 25 and 35, a glass transition temperature  $T_g$  below -50°C, and a molecular mass between 3500 and 4500;

between 75 and 115 g of an isocyanate of the MDI type having an NCO % content equal to 11.9%;

between 5 and 30 g of carbon black;

between 0.5 and 3 g of catalyst;

between 10 and 30 g of pyrogenic silica;

between 135 and 180 g of a liquid and amorphous polyesterpolyol A with an index iOH between 27 and 34, a molecular mass of 3500, a functionality of two, and a glass transition temperature  $T_g$  of  $-30^{\circ}\text{C}$ ;

between 35 and 85 g of a liquid and amorphous polyesterpolyol B with an index iOH between 27 and 34, a molecular mass of 3500, a functionality of two, and a glass transition temperature  $T_g$  of  $+20^{\circ}\text{C}$ , respectively;

between 55 and 110 g of an MDI-type isocyanate, with an NCO % content of 11.9%;  
and

between 20 and 80 g of molecular sieve.

Claim 91 (New): The strip formed from the single damping material as claimed in claim 77, wherein the strip has, at  $20^{\circ}\text{C}$ , with a reference cross section of 15 mm in width and 3 mm in thickness, an equivalent real stiffness per unit length of 120 MPa and an equivalent loss factor of 0.75.

Claim 92 (New): The strip as claimed in claim 91, wherein the strip is inserted between a glass substrate and a metal element so as to be used for attaching the substrate to the metal element.